REMARKS/ARGUMENTS

Claims 1-3, 6-9, 12-24, 29, 31-37, 54, 64, 76, 89, 102, 117, 133, 150, 163, 164, 173, and 175-178 are currently pending. Claims 4, 11, 165-172, and 174 have been canceled without prejudice or disclaimer. The claim amendments are supported by the Applicant's original disclosure, including the original claims. It is respectfully submitted that no new matter has been added.

35 U.S.C. § 103(a)

Claims 1-3, 7-22, 29, 33, 54, 64, 76, 89, 102, 117, 133, 150, and 163-178 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Charbonnier, U.S. Patent No. 5,241,686, in view of D'Amico, U.S. Patent No. 5,127,100, and further in view of Barnett, U.S. Patent No. 5,509,051.

Claims 4-6, 23, 24, 31, 32, 35-37, 70-72, 83-85, 96-98, 111-113, 127-129, and 144-146 stand rejected under 35 U.S.C. §103 as unpatentable over Charbonnier, in view of D'Amico, U.S. Patent No. 5,127,100, and further in view of Karlsson, U.S. Patent No. 5,640,677.

Claims 165 and 166 were rejected under 35 U.S.C. §103(a) as being unpatentable over Charbonnier, U.S. Patent No. 5,241,686, in view of D'Amico, U.S. Patent No. 5,127,100, as applied to claim 1 above, and further in view of Jones, U.S. Patent No. 6,192,245.

The claims recite the novel feature of modifying the measured strength of the communication from the current cell by a current cell outset value, the current cell offset value being dependent on the offset information. A hysteresis offset may be used to modify the measured strength of the communication from the current cell at the station, the offset being dependent on the current cell being the current cell of the station. In other words, applying an offset to the current cell received signal strength from the currently active call base station because it is the current action cell reduces the amount of "ping-pong" selection activity which could occur at boundaries of cells.

As discussed in a previous response and at length, Charbonnier (US-5241686) discloses a method for optimising the distribution of the radio electric load on a radio communication cellular network at fixed intervals. Charbonnier discloses in column 6 that a synthesizer is positioned successively and cyclically on each frequency (for radio channels used as a beacon

route, i.e. base station frequencies). Then for each frequency, the output signal from the modem is analysed to determine if it is a valid beacon route, i.e. is a valid base station, and possibly read the characteristic data of the relay amongst which the value of the field correction parameter (H) for the base station is determined. At this point the field strength or power (E) of the electric field for the beacon route may also be measured. The unit may then compute the difference between the power of the received field and field correction parameter and stores the corrected field value in memory. Thus, all of the base stations have a field correction value applied associated with the available capacity of the base station in question.

It is only when the mobile has scanned the entire set of beacon routes listed in the table of frequencies, including the beacon route of the channel in which it is currently located, that the route compares the values of the corrected field and determines the beacon route having the highest corrected value.

As discussed above the beacon signal of the cell is corrected by a correction parameter value, which is the offset value. Although all of the cell/beacons have offset values dependent on the current capacity of the cell, there is no disclosure of a specific current cell offset value.

Charbonnier applies an offset to each cell and does not favour or indicate bias whether or not the beacon is currently in use by the given mobile unit.

Therefore the claim is furthermore novel over Charbonnier as the present application recites a current cell offset value linked, i.e. an offset associated with the cell being the current cell and other further offset values which are applied to non-current cell signals.

As indicated previously, there would be an advantage in the embodiments of the present application over the prior art in that for the prior art systems there is no or only limited ways to prevent the mobile jumping from cell to cell quickly as the handover would be highly dependent on the loading of the cell. Thus the loading correction factor has a harsh correction factor. It could be imagined that current cell station would jump from cell A to cell B if cell B was not considered to be heavily loaded but may attempt to immediately offload the station back to cell A and vice versa very soon after. The present invention would overcome such a problem as the offset is linked to the current cell would decrease the probability of premature offloading of the cell communication.

Thus the present invention implements a hysteresis or offset value depending on being the cell currently being used "the current cell" and therefore effectively biases the decision to the

current cell to prevent such rapid handover processes from having to occur unless absolutely necessary.

Charbonnier discloses a method whereby mobile stations measure the strength of signals from base stations, applies correction values (which depend on load indication) and selects the base station which has the highest correct field.

However, the modifying step of the current amended claims is **only** carried out if a pre-determined condition is satisfied. The pre-determined condition is specified in the independent claims that "*the strength of the communication from at least one other cell is greater than a threshold.*"

In the Charbonnier teaching, the modification is not dependent on any such factor and is continuously being performed. This is clear from column 2, line 54 onwards which discloses that "*the field correction perimeter of a fixed station depends on a proximity load indicator, periodically re-evaluated.*" Furthermore, in column 6, line 40 onwards, Charbonnier teaches that "*each relay is continuously sent a pre-determined signal.*" The implication here is that the modification, i.e., correction of parameters occurs continuously. Furthermore, in column 8, lines 58 onwards, Charbonnier discloses that "*the mobile, for example, scans a beacon route every 700 milliseconds.*" Again, this is for the purpose of computer corrected parameters. As can be seen through Charbonnier, in claim 1 in column 16, Charbonnier's teaching of "*correcting the measured radio electric field corresponding to each of said fixed stations...*" requires adding the correction factor each time.

An advantage in Applicant's exemplary embodiments of the invention is that the modified procedure, i.e., the correction procedure, does not have to be carried out all the time and is only carried out if a neighboring station signal exceeds a threshold. There is no disclosure or suggestion by Charbonnier, of this aspect and there is not suggestion by Charbonnier as to why one of ordinary skill in the art would be motivated to do so.

As far as Karlsson is concerned, Karlsson does disclose measuring and determining if the signal strength for a neighboring base station is above a threshold. However, this is not performed in order to determine whether measured signal strengths should be modified and subsequently compared. In Karlsson, the exact sentence in column 11, line 25, states "*the mobile then tunes to a preferred neighbour as soon as the measured signal strength for this neighbour is above the threshold set for this neighbour cell.*" In other words, if this pre-determined condition

exists the mobile simply tunes to a neighbouring cell. Thus, checking whether a neighbouring cell has a signal strength above threshold is for an entirely different purpose. In fact, the purpose of switching and tuning to a neighbouring cell in Karlsson is very obvious.

Further discussion of Karlsson may be found in the response filed August 31, 2009.

In combining the teachings of Charbonnier with those of Karlsson, no motivation is provided as to why one of ordinary skill in the art would consider, without the benefit of impermissible hindsight reconstruction, utilizing Karlsson's teaching for an entirely different purpose to modify Charbonnier.

The Patent Office asserted in the December 14, 2009 Office Action the following (in similar words more than once):

> D'Amico teaches measuring a duration of time for which the measured signal strength of the communication from a cell exceeds the measured strength of the communication from the another cell (Col. 4 lines 18-25, there must be a higher signal strength from the other cell for a particular period of time thus there is a measurement of a time period in order to determine if said particular period of time is reached), changing the current cell with which the station is associated, wherein the current cell is changed only if the measured duration of time is at least a predetermined time period (Col. 4 lines 18-25, there must be a higher signal strength from the other cell for a particular period of time thus there is a measurement of a time period in order to determine if said particular period of time is reached).

The claims no longer recite a duration of time, so the D'Amico is no longer relevant.

However, the claims no longer recite a timer. Thus, the relevance of Barnett is lost. Furthermore, in the December 14, 2009 Office Action, no discussion of the relevance of Barnett is provided.

For reference, though, to find a discussion of Barnett and/or D'Amico, the reader's attention is directed to the response filed August 31, 2009, the discussion of which is hereby incorporated by reference regarding Barnett and other cited references.

It is clear that all of the independent claims recite the subject matter described above and are therefore novel and non-obvious for at least the same reasons.

As such, Karlsson does not remedy the deficiencies of Charbonnier and D'Amico (whether or not further in view of Barnett).

Jones et al discloses a method for determining a handover for a mobile station in a multi-cellular communication system having a serving cell, a plurality of neighbouring cells, and at least one control cell where the cell includes at least one macro cell and a plurality of micro cells. The document does disclose as indicated in the flow diagram of Figure 2 and the Figure 1 that the mobile station monitors measurement reports for the serving cell and neighbour cells, and that when a mobile station served by a cell 3 detects that a neighbour cell 4 is being received at a power which exceeds a threshold, it starts a timer.

The claims no longer recite a "predetermined time period."

As such, Jones is not believed to be relevant to the claimed invention.

The reader's attention is directed to the response filed August 31, 2009 for a treatment of Jones.

As such, Jones does not remedy the deficiencies of Charbonnier, D'Amico, Barnett, and/or Karlsson.

Thus, claims 1-9, 11-24, 29, 31-37, 54, 64, 76, 89, 102, 117, 133, 150, and 163-178 are allowable over the prior art of record.

The Patent Office is respectfully requested to reconsider and remove the rejections of the claims 1-9, 11-24, 29, 31-37, 54, 64, 76, 89, 102, 117, 133, 150, and 163-178 under 35 U.S.C. 103(a) based on Charbonnier in view of D'Amico and Barnett, Charbonnier in view of D'Amico, Barnett, and Karlsson, or Charbonnier in view of D'Amico, Barnett, and Jones, and to allow all of the pending claims 1-3, 7-22, 29, 33, 54, 64, 76, 89, 102, 117, 133, 150, and 163-178 as now presented for examination. An early notification of the allowability of claims 1-3, 7-22, 29, 33, 54, 64, 76, 89, 102, 117, 133, 150, and 163-178 is earnestly solicited.

Serial No.: 10/030,798
Group Art Unit: 2618
Respectfully submitted:

Walter J. Malinowski — April 8, 2010

Walter J. Malinowski — Date

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4/8/2010 — Claire F. Mian

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